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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,542	07/30/2003	Se Hwan Kim	HI-0160	6510

34610 7590 10/05/2006

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EXAMINER	
CHOW, DOON Y	
ART UNIT	**PAPER NUMBER**
2629	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,542	KIM ET AL.	
	Examiner	Art Unit	
	Dennis-Doon Chow	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original specification does not provide support for "a main module configured to be rotatably connected to the display module" as is now claimed in claim 23.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 8, 9, 13, 14, 16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye (5969696) and Applicant's Admitted Prior Art (AAPA).

Regarding to claims 1, and 21-22, Stoye discloses a computer system, comprising: generating means for generating sense signals 53 for identifying vendor display type of an installed display (col. 2, lines 30-43); and brightness control means for matching brightness control information corresponding to the vendor display type of the installed display among preset brightness control information for each of the plurality of display types, wherein the brightness control information is used to control the brightness of the installed display (col. 2, lines 44-62). Stoye does not explicitly disclose the checking means. However, the generating means as disclosed is equivalent the checking means because both the generating means and the checking means generate the same identifying function.

Stoye fails disclose an inverter for providing a driving current to control the brightness of the display.

AAPA, in same the display field, discloses the use of an inverter for providing a driving current to control the brightness of a display device (see page 2, paragraph 4).

In light of AAPA, it would have been obvious to one of ordinary skill in the art to use an inverter in Stoye's system to provide a driving current to control the brightness of the display because Stoye does not teach using any specific method for control the brightness of the display.

Regarding to claim 2, the above disclosures of claim 1 applied here as well. The checking means checks inherent control information of at least one of the display. Stoye further discloses output means for outputting a brightness control information corresponding to a inherent control information of at least one display among preset

brightness control information for each of the plurality of displays to output information to control brightness of the at least one display; and conversion means for supplying an information to drive the at least one display based on the output information of the output means (col. 2, lines 30-62).

Regarding to claim 8, Stoye disclose decoding the sense signals (inherent control information) of a display intended to use (col. 2, lines 44-55), retrieving the brightness control information corresponding to the display among one or more prescribed brightness control information (col. 2, lines 30-62), and variably controlling the brightness of the corresponding display by using the retrieved brightness control information (col. 2, lines 30-62).

Regarding to claim 9, Stoye inherently discloses the one or more brightness control information is stored in advance to correspond to the inherent control Information of the displays because the system is self-configurable.

Regarding to claim 13, the above disclosures of claim 1 applied here as well. The computer system inherently comprises a system BIOS and a memory for storing brightness control values.

Regarding to claim 14, the computer system inherently comprises a memory for strong brightness information and one or more correcting coefficients for respective displays because the system is self-configurable.

Regarding to claims 16 and 18-19, the above disclosures of claims 8 and 14 applied here as well.

Regarding to claim 20, Stoye discloses the specific brightness control

Information is for a generalized display type or generic display type, and wherein the displays are LCDs.

Regarding to claim 23, Stoye further discloses a display module configured with the display device and a single inverter, and a main module configured to be rotatably connected (hinged connector 60, col. 2, lines 13-23) to the display module, wherein the installable display types comprise a plurality of various vendor display types. The computer system is a notebook computer (see Fig. 1).

5. Claims 3, 4, 7, 10, 15, and17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye as applied to claims 1, 2, 8, 9, 13, 14, 16 and 18-23 above, and further in view of Lee et a. (5854617).

The disclosures of the above claims applied here as well.

Stoye does not disclose identifying power modes, and outputting signals corresponding to the identified power modes.

Lee, in the same display field, discloses a display device comprising an AC adapter mode and a battery mode (see Fig. 2), means for identifying the power modes, and means for outputting signal corresponding to the identified power modes to control the brightness of a display screen.

It would have been obvious to use Lee's concept in Stoye's invention so that the brightness of the display can be properly adjusted when a different power source is used.

6. Claims 5, 6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye in view of Lee et al. as applied to claims 3, 4, 7, 10, 15, and17 above, and further in view of Terasaki (58445400).

Regarding to claims 5 and 11-12, the modified Stoye does not disclose outputting a PWM signal to adjust the brightness of the display.

Terasaki, in the same display field, discloses a display device comprising a circuit means for generating and outputting a PWM signal to adjust the brightness of a display.

In light of Terasaki, it would have been obvious to one of ordinary skill in the art to use Lee circuit means in the system of the modified Stoye to output a PWM signal for adjusting the brightness of the display. This would have been obvious because modulating a pulse width of a signal is one of conventional ways to adjust the brightness of a display.

Regarding to claim 6, it is considered a matter of obvious choice to form the memory means, the output means and input means-control means on a single chip because it is not regarded as inventive to merely make these elements integral.

Response to Arguments

7. Applicant's arguments filed 8/31/2006 have been fully considered but they are not persuasive.

Applicant argues that Figure 2 provides a written description of an exemplary notebook computer. Therefore, the rejection of claim 23 under 35 U.S.C. 112 is overcome. The examiner disagrees with applicant's arguments. Figure 2 and the rest of

the disclosure may disclose the computer system is a notebook computer. However, nowhere in the disclosure disclose "a main module configured to be rotatably connected to the display module". A notebook computer does not almost comprise a main module configured to be rotatably connected to a display module.

Applicant argues that Stoye does not teach or suggest a computer system that includes at least features of an equipped inverter to provide driving currents for each installed vendor type of a plurality of display types, brightness control means and combinations thereof as recited in claim 1. The examiner disagrees with applicant's arguments. As indicated in the above rejections. Stoye teaches a controller for providing different signals based on each of displays to control the brightness (intensity, see col. 2, lines 56-62) of each of the displays. Applicant Admitted Prior Art (AAPA) discloses an equipped inverter for providing driving current for each display to control the brightness of each of the displays. Thus, the combination of Stoye and AAPA clearly teaches the feature of an equipped inverter to provide driving currents for each installed vendor type of a plurality of display types, brightness control means and combinations thereof as recited in claim 1. Applicant cannot show non-obviousness by attacking references individually whereas here the rejections are based on combination of references. In re Keller, 208 USPQ 871 (CCPA 1981).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 571-272-7767. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis-Doon Chow
Primary Examiner
Art Unit 2629

D. Chow
September 27, 2006